

AR09811PU-S

Human ACO1 / IREB1 (1-889, His-tag) - Purified

Alternate names:

Aconitase, Citrate hydro-lyase, Cytoplasmic aconitate hydratase, Ferritin repressor protein, IRP1, Iron regulatory protein 1, Iron-responsive element-binding protein 1

Quantity:

10 µg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

ACO1 (aconitate hydratase) plays a role as an iron sensor. This enzyme catalyzes the stereo-specific isomerization of citrate to isocitrate via cis-aconitate in the tricarboxylic acid cycle, a non-redox-active process.

Uniprot ID:

[P21399](#)

NCBI:

[NP_002188](#)

GeneID:

[48](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90%

Buffer System: 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2mM DTT, 100mM NaCl

Description:

Recombinant human ACO1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGSMSNPFAH LAEPLDPVQP GKKFFNLNKL EDSRYGRLPF
SIRVLEAAI RNCDEFLVKK QDIENILHWN VTQHKNIIEVP FKPARVILQD FTGVPVAVDF
AAMRDAVKKL GGDPEKINPV CPADLVIDHS IQVDFNRRAD SLQKNQDLEF ERNRERFEFL
KWGSQAFHNM RIIPPGSGII HQVNLEYLAR VVFDQDGYYY PDSLVTGDSH TTIDGLGIL
GWGVGGIEAE AVMLGQPISM VLPQVIGYRL MGKPHPLVTS TDIVLTITKH LRQVGVGKGF
VEFFGPGVAQ LSIADRATIA NMCPEYGATA AFFPVDEVSI TYLVQTGRDE EKLKYIKKYL
QAVGMFRDFN DPSQDPDFTQ VVELDLKTVV PCCSGPKRPQ DKVAVSDMKK DFESCLGAKQ
GFKGFQVAPE HHNDHKTFIY DNTEFTLAHG SVVIAAITSC TNTSNPSVML GAGLLAKKAV
DAGLNVMPYI KTSLSPGSGV VTYYLQESGV MPYLSQLGFD VVGYGCMTCI GNSGPLPEPV
VEAITQGDLV AVGVLSGNRN FEGRVHPNTR ANYLASPLV IAYAIAGTIR IDFEKEPLGV
NAKGQQVFLK DIWPTREIQ AVERQYVIPG MFKEVYQKIE TVNESWNALA TPSDKLFFWN
SKSTYIKSPP FFENLTLDLQ PPKSIVDAYV LLNLGDSVTT DHISPAGNIA RNSPAARYLT
NRGLTPREFN SYGSRRGNDA VMARGTFANI RLLNRFLNKQ APQTIHLPSP EILDVFDAAE
RYQQAGLPLI VLAGKEYGAG SSRDWAAGP FLLGIKAVLA ESYERIHRNS LVGMGVIPLE
YLPGENADAL GLTGQERYTI IIPENLKPQM KVQVKLDTGK TFQAVMRFD TVELTYFLNG
GILNYMIRKM AK

Molecular weight: 100.8 kDa

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

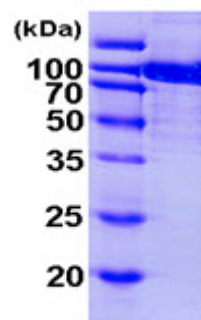
Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

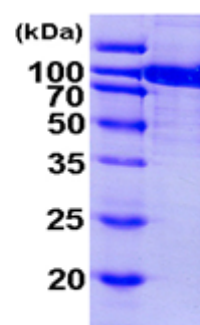
Vashisht A.A., et al (2009) Science 326:718-721.
 Salahudeen A.A., et al (2009) Science 326:722-726.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human ACO1, 1-889aa, His-tagged



15% SDS-PAGE (3ug)